

MORBIDITY AND MORTALITY WEEKLY REPORT

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Epidemiologic Notes and Reports

**Update: *Salmonella enteritidis* Infections
and Grade A Shell Eggs — United States, 1989**

Salmonella enteritidis (SE) remains an important cause of outbreaks and sporadic cases of gastroenteritis in the United States. This report summarizes three outbreaks in 1989 that were associated with *Salmonella*-contaminated Grade A eggs.

Suffolk County, New York. An outbreak of gastroenteritis occurred among 21 of 24 persons who attended a baby shower on July 1. Severe diarrhea, vomiting, fever, and cramps occurred a median of 9 hours (range: 5.5–57 hours) after the shower. Twenty ill persons sought medical care, and 18 were hospitalized. One attendee who was 38 weeks pregnant delivered while ill; the infant subsequently developed SE septicemia and required prolonged hospitalization. Additional secondary cases occurred in two household members of primary case-patients. SE was isolated from stool or rectal-swab cultures of all 21 primary and three secondary case-patients.

All 21 ill attendees, but none of the three attendees who remained well, reported eating a homemade baked ziti pasta dish consisting of one raw egg and ricotta cheese combined in a large baking pan with cooked tomato meat sauce and refrigerated overnight. The ziti dish was baked for 30 minutes at 350 F (176.7 C) immediately before serving. Several attendees commented that the center of the ziti was still cold when served. SE was isolated from samples of the leftover baked ziti and from a pool of seven eggs from the original carton. The eggs were supplied by a New Jersey egg producer; SE was isolated from several flocks tested at the farm.

Carbon County, Pennsylvania. The Pennsylvania State Department of Health was notified of gastroenteritis in 12 of 32 persons who attended an office party on August 24. Symptoms included diarrhea (100%), headache (58%), abdominal pain (42%), nausea (42%), fever (25%), and vomiting (17%). The median incubation period was 27.5 hours (range: 7–72 hours). Of three persons who were hospitalized, two

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recovered. The third person, a 40-year-old previously healthy man, experienced severe diarrhea and high fever, was admitted to an emergency room on the fourth day of illness, and died within 2 hours. Clinical course and autopsy findings were compatible with acute salmonellosis; postmortem blood, urine, and stool cultures yielded SE.

The only food and beverages served at the party were six pies (two fruit-based pies and four egg-based custard pies), coffee, and juice. Illness was associated with consumption of the custard pies (relative risk=8.6; 95% confidence interval=1.3–58.6). All the pies had been prepared August 23 by a commercial bakery and held without refrigeration for approximately 21 hours before consumption. Two other cases of *Salmonella* (identified as group D, which includes SE) infection were reported in persons who did not attend the office party but who ate custard pie prepared by this bakery on the same day. The source of the eggs is unknown.

Knox County, Tennessee. An outbreak of SE gastroenteritis occurred among persons who patronized a restaurant on April 8. Twenty-seven cases were reported to the county health department; stool cultures from 23 persons all yielded SE. At least 24 ill persons reported onset of fever, abdominal cramps, and diarrhea within 48 hours after eating at the restaurant; 11 were hospitalized. All had eaten either Hollandaise or Bernaise sauce on April 8. Ten meal companions of ill persons were contacted; none had developed illness or had eaten Hollandaise or Bernaise sauce ($p<0.01$). Both sauces were prepared with Grade A extra-large eggs that were heated but not thoroughly cooked. No other food item was consumed by >20% of those who became ill. The eggs were traced to a farm in Indiana.

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Editorial Note: Since 1979, isolation rates of SE have increased dramatically in New England and, more recently, in the mid-Atlantic states (Figure 1) (1). As of October 31, 1989, 49 SE outbreaks had been reported for 1989; these outbreaks have been associated with 1628 cases and 13 deaths (including 12 deaths in nursing homes). From 1985 through 1988, state health departments reported 140 SE outbreaks associated with 4976 ill persons (of whom 896 were hospitalized) and 30 deaths (Table 1). Contaminated food was implicated in 89 (64%) outbreaks; Grade A shell eggs were implicated in 65 (73%) of these. From 1985 to 1989, the proportion of outbreaks from outside New England and the mid-Atlantic regions increased from 5% to 43%.

Foods containing a single SE-contaminated egg can cause outbreaks of severe illness (2). Salmonellosis can be especially severe in infants <3 months of age, in the elderly, and in persons who are immunocompromised. Most SE-associated deaths occur in nursing home residents, but salmonellosis can be fatal in otherwise healthy hosts when ingested in sufficient doses (3).

Thorough cooking kills *Salmonella*. Contaminated eggs that are liquid or runny after light cooking can contain *Salmonella*. When eggs are heavily contaminated,

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standard cooking methods for many egg-containing foods (including Hollandaise and Bernaise sauces, meringue, and scrambled and soft-boiled eggs) may not kill all *Salmonella* (4,5). If raw or incompletely cooked eggs are held at room temperature for >2–4 hours, the risk of outbreaks of *Salmonella* infections may increase because *Salmonella* can grow to high concentrations under such conditions.

In regions where egg-associated salmonellosis has been identified, the public should be advised to not eat raw or undercooked eggs. In addition, consumers should avoid eating foods that contain raw eggs, such as Caesar salad, homemade eggnog, and homemade mayonnaise. Foods made with pasteurized eggs (e.g., commercial eggnog, ice cream, and mayonnaise) are safe to eat. In hospitals and nursing homes, where high-risk patients may be exposed, the risk for outbreaks can be reduced by use of pasteurized egg products in recipes that require pooled eggs and by proper preparation and storage of foods containing eggs. Bulk-quantity pasteurized egg products are available commercially for use in food-service establishments.

Clinicians and microbiologists are encouraged to report cases of salmonellosis to local and state health departments. Because some strains of SE isolated from patients in the northeast are reported to produce minimal H₂S, suspect isolates that otherwise

FIGURE 1. Isolation rate per 100,000 population of *Salmonella enteritidis*, by region — United States, 1976–1988

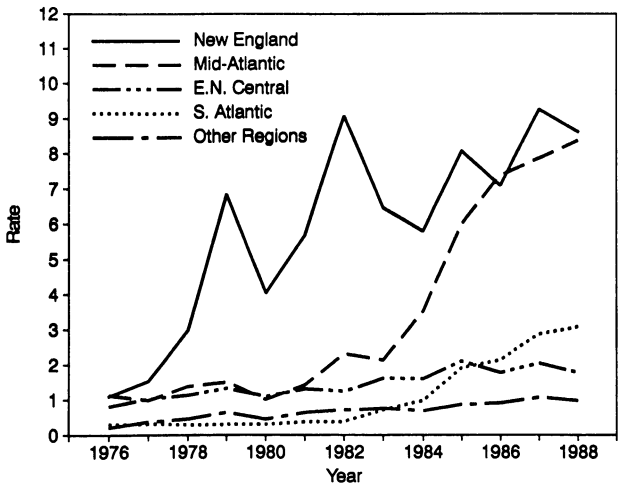


TABLE 1. Number of reported outbreaks and associated cases and deaths caused by *Salmonella enteritidis*, by year — United States, January 1985–October 1989

Year	Outbreaks	Cases	Deaths
1985	19	608	1
1986	34	1042	6
1987	50	2370	15
1988	37	956	8
1989*	49	1628	13

*Data reported to CDC through October 31, 1989.

Salmonella enteritidis — Continued

resemble *Salmonella* should not be discarded on this basis alone. To help characterize sporadic cases and to assist in epidemiologic investigations, *Salmonella* isolates can be serotyped by state public health laboratories. When eggs are implicated, investigation of outbreaks and notification of state agriculture departments and the U.S. Department of Agriculture are crucial in efforts to identify sources of contaminated eggs and to develop and implement control measures.

Information on cooking and handling eggs safely is available from the U.S. Department of Agriculture Meat and Poultry Hotline ([800] 535-4555) and from county extension home economists.

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Unintentional Methyl Bromide Gas Release — Florida, 1988

At approximately 11 a.m. on November 30, 1988, a tractor-trailer truck carrying 32 cylinders of a gaseous toxic pesticide (methyl bromide, 98%, and chloropicrin, 2%) overturned on an unpaved road in a rural area of Collier County, Florida. One of the cylinders, filled to an unknown level but containing no more than 1500 pounds of pressurized gas (the maximum capacity of the cylinder), was punctured during the incident and released toxic gas into the atmosphere.

At the time of the incident, wind speeds varied between 5 and 10 miles per hour and came primarily from the northeast. The 53 emergency responders included personnel from the Collier County Sheriff's Department, a county ambulance service, local fire departments, and the Florida State Patrol. Firefighters used protective equipment, including self-contained breathing apparatus; the other responders had no protective equipment. The Collier County Sheriff's Department initiated a voluntary evacuation by visiting every house in a 10-square-mile area; this area contained approximately 50 households with an estimated population of 130-140 persons. Risk of exposure was declared over at 7 p.m.

Nine emergency responders (none of whom were firefighters) and one local resident were treated at a community hospital for symptoms associated with exposure to the gas. Of these, six were hospitalized for a total of 17 person-days. Symptoms included nausea, vomiting, difficulty breathing, headache, dizziness, burning throat, coughing, and chest tightness. The primary route of exposure was inhalation only for seven patients, dermal only for two, and both dermal and inhalation for one patient. Although the driver was pinned in the truck for at least 1 hour, he tested negative for methyl bromide exposure—probably as a consequence

Methyl Bromide Gas — Continued

of protection afforded by the cab and by the cab's location upwind of the spill. The local resident, a 19-year-old woman who resided approximately two blocks southwest of the overturned vehicle, was most likely exposed by gas drift. All patients recovered without neurologic sequelae.

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Editorial Note: Methyl bromide gas, used primarily as an agricultural fumigant for nematodes, is a severe pulmonary irritant and neurotoxin. The major symptoms reported in this incident are consistent with previously reported symptoms (1). Renal tubule damage and pulmonary edema have been reported in fatalities associated with methyl bromide exposures (2).

At least three studies suggest that the public health impact of hazardous material releases is difficult to evaluate because existing databases vary in format and cannot be readily compared. For example, a review of two databases in California—one maintained by the U.S. Department of Transportation and the other by the California Highway Patrol—examined 474 and 485 hazardous materials incidents, respectively. Only 18 incidents were reported in both sources (3). In a study of three national databases, only eight (1%) of 587 acute releases of hazardous materials were common to all three systems (4). In the third study, even though 502 incidents were reported to two databases, substantial differences were noted for specific details regarding related morbidity and mortality (5).

To establish a consistent database, the Agency for Toxic Substances and Disease Registry (ATSDR) and five states (Colorado, Iowa, Michigan, New Hampshire, and Wisconsin) have developed a pilot Emergency Event Surveillance System to investigate selected transportation and fixed facility incidents. The objectives of this surveillance system are to 1) describe the temporal and geographic distribution of hazardous material emergencies within these five states, 2) describe the morbidity and causes of mortality experienced by employees, first responders, and the general public as a result of these incidents, 3) analyze and describe the risk factors associated with the morbidity and mortality, and 4) propose strategies to reduce subsequent morbidity and mortality in comparable events. The five state health departments plan to begin data collection from local reporting agencies in January 1990. Data will be forwarded to ATSDR, and a centralized database accessible to public health agencies of the five states will be established. This process should facilitate immediate review of potential adverse health effects that can result from exposure to specific compounds.

Adverse health effects from hazardous material releases can be minimized through the development and implementation of comprehensive contingency or preparedness plans. In particular, because emergency response workers are at substantial risk from hazardous material releases, appropriate equipment and training for these persons could prevent injury and illness. The Superfund Amendments and Reauthorization Act of 1986 mandates that local emergency planning committees develop preparedness plans for such events (6). ATSDR can assist in the development of the health components of these plans. Additional information is available from ATSDR's Emergency Response Branch, Division of Health Assessment and Consultation, at (404) 639-0615.

*Methyl Bromide Gas — Continued**References*

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*International Notes***Update: Dracunculiasis Eradication — Worldwide, 1989**

Dracunculiasis (guinea worm disease) is a disabling infection transmitted through drinking water containing cyclopoid copepods (water fleas) harboring infective larvae of the parasite *Dracunculus medinensis*. However, because the disease is contracted only by persons who drink contaminated water, infection can be completely prevented by providing safe sources of potable drinking water, by filtering drinking water through a cloth, by boiling the water, or by treating the water with temephos (Abate®).^{*} Because transmission can be interrupted, the potential exists for eradication of guinea worm disease.

Dracunculiasis occurs in 16 African countries and in parts of India and Pakistan (Figure 1). An estimated 120 million persons in Africa and 10 million in Asia are at risk for the infection (1). An estimated 10 million persons are affected by the disease each year. This report updates the progress of international efforts to eradicate the disease in the 1990s.

Global initiatives to eradicate dracunculiasis were given impetus by resolutions adopted in April 1981 and November 1987 by the steering committee of the International Drinking Water Supply and Sanitation Decade (1981-1990). The committee called for elimination of dracunculiasis in each country with endemic dracunculiasis.[†] Collaborative efforts have involved several agencies and organizations, including the World Health Organization (WHO), Global 2000, Inc., of Emory University Carter Center, Inc., the United Nations International Children's Emergency Fund (UNICEF), the U.N. Development Programme (UNDP), the U.S. Peace Corps, and CDC. In May 1989, the 42nd World Health Assembly adopted a resolution calling for the elimination of dracunculiasis as a public health problem during the 1990s.

^{*}Use of trade names is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

[†]In 1980, several agencies, including the United Nations Development Programme, the World Health Organization, and the World Bank, declared 1981-1990 the "International Drinking Water Supply and Sanitation Decade." A major goal is the provision of safe drinking water to all countries.

Dracunculiasis Eradication — Continued

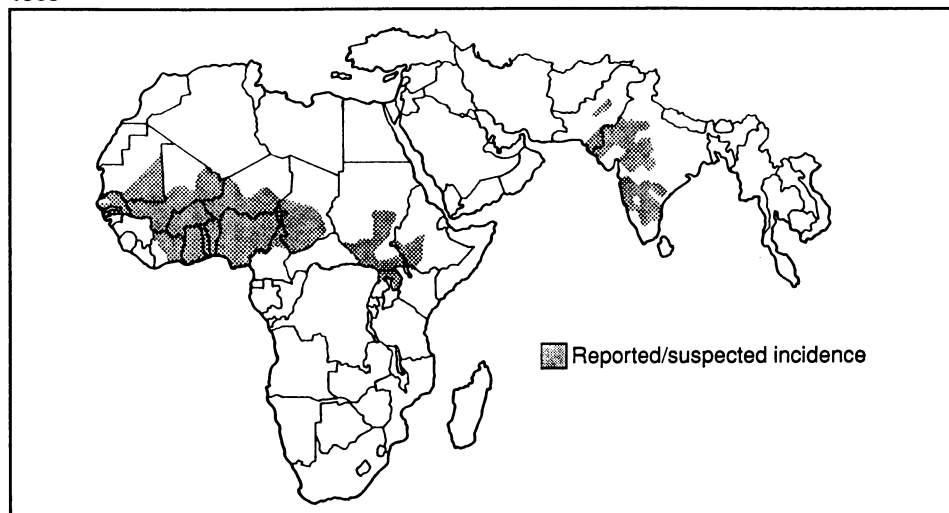
National dracunculiasis eradication programs were initiated in India in 1980, Pakistan and Ghana in 1987, and Nigeria in 1988. Benin, Burkina Faso, Cameroon, and Togo have also instituted programs to combat the disease. During 1989 and 1990, surveys to determine the extent of dracunculiasis are planned in Benin, Burkina Faso, Ghana, Mauritania, and Senegal. Repeat surveys will be carried out in India and Nigeria. Pakistan conducts monthly surveys for cases in all villages with endemic dracunculiasis. The number of cases reported by India and Pakistan suggest progress in the elimination programs in those countries (Table 1).

In July 1989, \$9.6 million was pledged for dracunculiasis eradication at a donors' conference in Lagos, Nigeria. Donors included Global 2000, the Bank of Credit and Commerce International, the government of Nigeria, UNDP, and UNICEF. Support from UNDP and UNICEF will ensure that each African country with endemic dracunculiasis can conduct a national assessment of the extent of the disease and prepare, by 1991, a national plan for eradication of the disease. The U.S. Peace Corps, with support from the U.S. Agency for International Development (USAID), plans to provide up to 10 volunteers in each of 10 African countries to work on dracunculiasis eradication. More recently, the USAID mission to Ghana approved assistance for that country's dracunculiasis eradication program. WHO will convene an international meeting in Geneva during February 1990 to develop consensus criteria for certifying that transmission no longer occurs in a country formerly endemic for dracunculiasis.

Reported by: WHO Collaborating Centre for Research, Training, and Control of Dracunculiasis. Global 2000, Inc, Emory University Carter Center, Inc, Atlanta, Georgia. Div of Parasitic Diseases, Center for Infectious Diseases, CDC.

Editorial Note: Larvae of *D. medinensis* are liberated in the stomach or duodenum following ingestion of contaminated water. During an incubation period of approximately 1 year, the larvae develop into worms 20 cm to 120 cm in length. Emergence of the worm(s) through the skin (usually the lower part of the legs) causes severe local

FIGURE 1. Areas of reported or suspected dracunculiasis incidence — worldwide, 1989



Dracunculiasis Eradication — Continued

pain and can incapacitate the patient for 1–3 months. Although dracunculiasis rarely kills and recovery is generally complete, the disease has serious effects on the health, agricultural production, and school attendance of affected populations. No practical treatment is available.

Since early in the 20th century, human dracunculiasis has spontaneously disappeared from several countries where it was formerly endemic, e.g., Egypt and Iraq; similarly, the disease disappeared from several countries of mainland South America and the West Indies, where it was introduced during the African slave trade (2). The disease was eliminated by intervention from the southern Union of Soviet Socialist Republics in the 1930s (3) and Tamil Nadu state in India in 1984 (4). Other countries (Central African Republic, Gambia, Guinea, Iran, Saudi Arabia, Somalia, and Yemen) also have reported that the disease no longer occurs within their national territory.

Strategies required to eradicate dracunculiasis in the 1990s include the needs to: 1) conduct national epidemiologic assessments to ascertain the extent of the problem in countries with endemic dracunculiasis that have not yet done so; 2) develop national plans of action in each of the remaining countries with endemic dracunculiasis; 3) mobilize funding and other support to implement national elimination programs; and 4) enhance funding for an international headquarters to provide leadership, guidance, and coordination for national programs (Global 2000/WHO Collaborating Centre for Research, Training, and Control of Dracunculiasis, unpublished data). In addition, interventions against dracunculiasis can be

TABLE 1. Reported cases of dracunculiasis, by year — worldwide, 1984–1989

Country*	1984	1985	1986	1987	1988	1989
Benin	NA [†]	NA	NA	400	13,892	NA
Burkina Faso	1,739	458	2,558	1,957	1,069	NA
Cameroon	0	168	86	NA	746	NA
Chad	1,472	9	314	NA	NA	NA
Côte d'Ivoire	2,573	1,889	1,177	483 [§]	NA	NA
Ethiopia	2,882	1,467	3,385	NA	751	NA
Ghana	4,244	4,501	4,717	18,398	71,767	52,808 [§]
India	39,792	30,950	23,070	17,031	12,023	6,791 [§]
Kenya	NA	NA	NA	NA	NA	NA
Mali	5,008	4,072	5,640	435	584	NA
Mauritania	1,241	1,291	NA	NA	NA	NA
Niger	NA	1,373 [§]	NA	699	NA	NA
Nigeria	8,777	5,234	2,821	216,484	653,492	NA
Pakistan	NA	NA	NA	2,400	1,111	449 [§]
Senegal	NA	NA	NA	NA	NA	NA
Sudan	NA	NA	822	NA	542	NA
Togo	1,839	1,456	1,325	NA	156	NA
Uganda	6,230	4,070	NA	NA	NA	NA

*Data for Kenya and Senegal are being compiled for 1989.

[†]Data not available.

[§]Provisional data.

[§]Includes cases of filariasis other than dracunculiasis.

Dracunculiasis Eradication — Continued

integrated with other related activities, such as rural water supply projects, community development, health education, agricultural development, and primary health care.

Because the principal requirement for eradication is the provision of clean drinking water, there are no substantial technical barriers to achieving dracunculiasis eradication. However, a major problem in some countries endemic for dracunculiasis is political instability (violence and social upheaval) that disrupts traditional sanitary conditions, spreads disease to new areas, and impedes implementation of preventive measures to affected populations. Important remaining barriers to eradication may include inadequate recognition of the opportunity for eradication and insufficient funding of eradication activities.

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TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	51st Week Ending			Cumulative, 51st Week Ending		
	Dec. 23, 1989	Dec. 24, 1988	Median 1984-1988	Dec. 23, 1989	Dec. 24, 1988	Median 1984-1988
Acquired Immunodeficiency Syndrome (AIDS)	81	U*	186	33,345	30,593	12,971
Aseptic meningitis	149	147	147	9,859	6,941	10,158
Encephalitis: Primary (arthropod-borne & unspc)	10	15	21	889	804	1,204
Post-infectious	5	8	2	86	123	110
Gonorrhea: Civilian	10,128	11,991	16,281	678,332	682,550	835,760
Military	139	117	339	10,880	11,390	16,756
Hepatitis: Type A	618	595	527	34,546	26,608	22,604
Type B	445	371	514	22,512	22,339	25,319
Non A, Non B	39	54	56	2,272	2,518	3,427
Unspecified	23	51	71	2,234	2,363	4,286
Legionellosis	24	23	18	1,099	988	811
Leprosy	2	3	4	168	177	237
Malaria	12	27	16	1,213	999	999
Measles: Total†	696	43	40	15,727	2,919	2,919
Indigenous	696	41	40	15,050	2,588	2,588
Imported	-	2	1	677	331	331
Meningococcal infections	29	49	50	2,553	2,726	2,614
Mumps	129	132	132	5,516	4,669	4,669
Pertussis	47	83	71	3,668	3,150	3,150
Rubella (German measles)	-	4	4	374	220	515
Syphilis (Primary & Secondary): Civilian	596	692	692	41,318	37,958	27,559
Military	2	26	2	254	219	163
Toxic Shock syndrome	9	9	9	371	350	352
Tuberculosis	380	375	494	21,014	20,888	21,201
Tularemia	1	2	2	142	184	184
Typhoid Fever	3	8	8	469	398	374
Typhus fever, tick-borne (RMSF)	9	6	3	613	599	687
Rabies, animal	23	59	68	4,430	4,213	5,229

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1989		Cum. 1989
Anthrax	-	Leptospirosis	97
Botulism: Foodborne	24	Plague	4
Infant (Tenn. 1, N. Mex. 1)	25	Poliomyelitis, Paralytic	-
Other	5	Psittacosis (Upstate N.Y. 1, N.C. 4)	106
Brucellosis	83	Rabies, human	1
Cholera	-	Tetanus (Ga. 1)	46
Congenital rubella syndrome	3	Trichinosis (N.J. 1)	25
Congenital syphilis, ages < 1 year	243		
Diphtheria	2		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.

†There were no cases of internationally imported measles reported for this week.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending December 23, 1989 and December 24, 1988 (51st Week)

Reporting Area	AIDS Cum. 1989	Aseptic Menin- gitis Cum. 1989	Encephalitis		Gonorrhea (Civilian) Cum. 1989		Hepatitis (Viral), by type				Legionel- losis Cum. 1989	Leprosy Cum. 1989
			Primary Cum. 1989	Post-in- fectious Cum. 1989			A Cum. 1989	B Cum. 1989	NA,NB Cum. 1989	Unspec- ified Cum. 1989		
UNITED STATES	33,345	9,859	889	86	678,332	682,550	34,546	22,512	2,272	2,234	1,099	168
NEW ENGLAND	1,388	534	26	2	20,123	21,642	722	1,105	71	81	69	10
Maine	66	32	5	-	255	394	24	70	6	1	6	-
N.H.	39	56	1	-	181	273	59	58	10	4	2	-
Vt.	13	42	4	-	68	113	36	81	8	-	4	-
Mass.	758	168	8	2	7,915	7,465	233	612	27	59	43	8
R.I.	79	119	-	-	1,403	1,965	54	76	5	10	14	1
Conn.	433	117	8	-	10,301	11,432	316	208	15	7	-	1
MID. ATLANTIC	9,607	1,410	41	7	94,905	108,551	4,165	3,544	211	232	285	23
Upstate N.Y.	1,446	575	33	5	18,063	15,800	998	728	77	21	101	4
N.Y. City	4,861	193	5	2	33,223	45,661	447	1,400	34	173	49	16
N.J.	2,219	-	3	-	14,293	15,882	464	591	32	7	43	2
Pa.	1,081	642	-	-	29,326	31,408	2,256	825	68	31	92	1
E.N. CENTRAL	2,826	1,960	325	9	127,780	116,662	2,104	2,694	281	113	301	4
Ohio	482	663	129	4	34,087	26,191	410	486	42	24	127	-
Ind.	359	266	44	3	9,850	8,782	215	415	29	41	60	1
Ill.	1,151	388	72	2	41,339	34,983	935	725	109	28	20	3
Mich.	504	520	49	-	33,072	36,754	296	669	48	20	51	-
Wis.	130	123	31	-	9,432	9,952	248	399	33	-	43	-
W.N. CENTRAL	836	520	50	4	32,745	29,054	1,465	993	116	31	42	1
Minn.	164	92	15	1	3,779	3,880	163	114	24	7	3	-
Iowa	57	85	15	-	2,757	2,216	176	47	15	5	6	-
Mo.	445	217	3	-	19,978	16,925	767	686	49	13	18	-
N. Dak.	8	14	4	-	141	187	14	23	4	2	1	-
S. Dak.	4	15	4	-	272	467	25	10	9	-	2	-
Nebr.	33	22	6	-	1,622	1,416	97	30	3	-	6	1
Kans.	125	75	3	3	4,196	3,963	223	83	12	2	6	-
S. ATLANTIC	6,857	1,954	169	26	184,682	191,424	3,614	4,332	339	352	142	2
Del.	81	84	1	-	3,194	3,057	86	140	6	8	12	-
Md.	745	232	19	2	21,073	20,196	1,127	726	31	31	32	-
D.C.	502	26	-	-	10,255	14,311	12	40	3	-	1	-
Va.	400	408	44	3	15,994	14,127	322	309	69	212	13	-
W. Va.	73	97	86	-	1,482	1,308	27	111	14	10	-	-
N.C.	492	219	11	2	28,621	27,254	445	1,044	89	-	35	1
S.C.	329	40	1	-	16,493	15,064	89	605	4	11	9	-
Ga.	1,102	135	3	1	36,908	36,278	382	430	14	9	26	-
Fla.	3,133	713	4	18	50,662	59,829	1,124	927	109	71	14	1
E.S. CENTRAL	740	695	49	3	56,229	53,361	412	1,604	157	13	65	-
Ky.	116	218	20	1	5,456	5,439	126	389	53	6	9	-
Tenn.	266	125	5	-	18,878	18,750	161	821	35	-	40	-
Ala.	213	248	21	1	18,208	15,840	79	253	57	3	14	-
Miss.	145	104	3	1	13,687	13,332	46	141	12	4	2	-
W.S. CENTRAL	2,748	958	86	12	71,225	73,122	3,911	2,295	150	525	54	25
Ark.	78	47	10	-	7,876	7,220	283	76	15	13	3	-
La.	506	81	22	5	15,331	14,603	270	377	17	3	10	-
Okla.	169	83	12	5	6,151	6,915	494	212	38	40	26	-
Tex.	1,995	747	42	2	41,867	44,384	2,864	1,630	80	469	15	25
MOUNTAIN	1,136	328	16	6	14,217	14,615	5,117	1,481	214	157	66	3
Mont.	19	6	-	-	192	397	89	49	7	3	3	1
Idaho	23	2	-	1	168	316	166	128	13	4	4	-
Wyo.	18	11	-	-	109	198	67	10	4	-	-	-
Colo.	393	159	3	2	3,162	3,272	520	175	62	68	5	-
N. Mex.	86	13	2	1	1,229	1,441	713	214	34	3	8	1
Ariz.	339	99	5	-	5,662	5,336	2,718	558	51	63	27	1
Utah	74	24	1	2	437	530	502	115	27	5	8	-
Nev.	184	14	5	-	3,258	3,125	342	232	16	11	11	-
PACIFIC	7,407	1,500	127	17	76,426	74,119	13,036	4,464	753	730	75	100
Wash.	486	-	6	1	6,455	7,080	3,047	970	198	73	26	10
Oreg.	229	-	-	-	3,051	3,178	2,268	529	81	17	2	1
Calif.	6,489	1,369	106	16	65,283	62,263	6,905	2,815	457	623	43	70
Alaska	17	37	12	-	1,122	1,029	642	60	9	5	1	-
Hawaii	186	94	3	-	515	569	174	90	8	12	3	19
Guam	1	5	1	-	124	143	6	-	-	7	-	1
P.R.	1,426	138	6	1	1,073	1,288	196	259	26	19	-	9
V.I.	27	-	-	-	568	440	-	8	-	-	-	-
Amer. Samoa	-	-	-	-	44	77	36	-	2	-	-	5
C.N.M.I.	-	-	-	-	73	52	3	10	-	2	-	1

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending December 23, 1989 and December 24, 1988 (51st Week)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
		Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	1989	Cum. 1989	Cum. 1988
UNITED STATES	1,213	696	15,050	-	677	2,919	2,553	129	5,516	47	3,668	3,150	-	374	220
NEW ENGLAND	84	2	345	-	38	115	193	-	88	2	393	321	-	6	10
Maine	1	-	-	-	1	7	17	-	-	-	25	24	-	-	-
N.H.	2	-	9	-	7	88	17	-	15	-	16	47	-	4	5
Vt.	4	-	1	-	2	-	10	-	3	1	10	5	-	1	-
Mass.	46	2	87	-	21	4	105	-	59	1	299	205	-	1	4
R.I.	19	-	37	-	3	-	1	-	-	-	21	17	-	-	1
Conn.	12	-	211	-	4	16	43	-	11	-	22	23	-	-	-
MID. ATLANTIC	230	4	807	-	190	989	381	4	478	11	324	314	-	35	15
Upstate N.Y.	37	-	58	-	99	40	135	4	181	8	148	215	-	14	2
N.Y. City	94	-	108	-	17	52	46	-	23	-	17	10	-	16	7
N.J.	61	-	417	-	16	354	74	-	193	-	35	19	-	5	4
Pa.	38	4	224	-	58	543	126	-	81	3	124	70	-	-	2
E.N. CENTRAL	82	689	5,604	-	116	273	329	16	633	12	588	302	-	29	33
Ohio	11	688	2,204	-	35	109	119	12	165	8	147	49	-	3	1
Ind.	11	-	112	-	-	57	33	1	51	4	60	77	-	-	-
Ill.	36	-	2,551	-	14	72	85	-	207	-	166	59	-	22	28
Mich.	16	1	321	-	23	31	68	3	161	-	46	39	-	1	4
Wis.	8	-	416	-	44	4	24	-	49	-	169	78	-	3	-
W.N. CENTRAL	36	-	833	-	11	21	75	-	440	2	192	144	-	7	2
Minn.	10	-	17	-	-	11	17	-	2	-	60	62	-	-	-
Iowa	5	-	12	-	1	2	2	-	52	-	15	34	-	1	-
Mo.	13	-	561	-	-	8	21	-	81	-	92	25	-	4	-
N. Dak.	2	-	-	-	-	-	-	-	-	-	4	11	-	1	-
S. Dak.	1	-	-	-	-	-	8	-	-	-	4	5	-	-	-
Nebr.	2	-	111	-	2	-	18	-	5	2	9	-	-	-	-
Kans.	3	-	132	-	8	-	9	-	300	-	8	7	-	1	2
S. ATLANTIC	214	-	662	-	76	437	473	41	1,091	5	365	266	-	21	18
Del.	7	-	42	-	1	-	2	-	1	-	1	7	-	-	-
Md.	38	-	69	-	36	17	75	38	567	3	80	48	-	2	1
D.C.	11	-	37	-	5	-	15	2	142	1	4	1	-	-	-
Va.	46	-	19	-	3	239	73	-	132	-	36	29	-	-	11
W. Va.	3	-	53	-	-	6	13	-	16	-	34	10	-	-	-
N.C.	21	-	187	-	3	5	68	1	45	1	79	67	-	1	1
S.C.	10	-	15	-	-	-	33	-	49	-	-	1	-	-	-
Ga.	16	-	2	-	16	-	78	-	92	-	54	39	-	-	-
Fla.	62	-	238	-	12	170	116	-	47	-	77	64	-	18	3
E.S. CENTRAL	19	1	250	-	5	69	92	2	238	-	200	106	-	5	2
Ky.	1	-	40	-	4	35	46	-	9	-	1	13	-	-	-
Tenn.	5	-	150	-	-	-	13	2	86	-	113	30	-	4	2
Ala.	7	1	59	-	1	-	28	-	29	-	79	58	-	1	-
Miss.	6	-	1	-	-	34	5	N	N	-	7	5	-	-	-
W.S. CENTRAL	77	-	3,264	-	75	25	184	44	1,670	3	378	239	-	50	23
Ark.	-	-	3	-	19	1	13	4	196	-	31	38	-	-	3
La.	3	-	119	-	-	-	46	13	736	-	31	20	-	5	-
Okl.	8	-	126	-	-	8	25	10	208	3	66	62	-	1	1
Tex.	66	-	3,016	-	56	16	100	17	530	-	250	119	-	44	19
MOUNTAIN	27	-	364	-	54	204	75	21	289	3	686	928	-	37	6
Mont.	1	-	12	-	1	84	2	-	4	-	43	4	-	1	-
Idaho	2	-	-	-	7	1	3	12	39	-	76	358	-	32	-
Wyo.	1	-	-	-	-	-	1	-	8	-	-	2	-	2	-
Colo.	6	-	80	-	19	115	25	5	82	3	106	42	-	1	2
N. Mex.	5	-	16	-	15	-	2	N	N	-	35	50	-	-	-
Ariz.	9	-	141	-	4	3	28	4	130	-	400	440	-	-	-
Utah	-	-	114	-	-	1	6	-	19	-	25	31	-	-	3
Nev.	3	-	1	-	8	-	8	-	7	-	1	1	-	1	1
PACIFIC	444	-	2,921	-	112	786	751	1	589	9	542	530	-	184	111
Wash.	36	-	31	-	22	7	81	-	52	4	193	126	-	-	-
Oreg.	20	-	12	-	48	8	55	N	N	-	18	50	-	4	-
Calif.	377	-	2,857	-	30	757	598	-	515	4	304	286	-	158	80
Alaska	3	-	1	-	-	2	13	-	2	-	1	8	-	-	-
Hawaii	8	-	20	-	12	12	4	1	20	1	26	60	-	22	31
Guam	3	U	-	U	-	1	1	U	6	U	1	-	U	-	1
P.R.	1	6	568	-	-	231	8	-	8	-	6	15	-	8	3
V.I.	-	U	4	U	-	-	-	U	18	U	-	-	U	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	3	U	-	-	U	-	-
C.N.M.I.	1	U	-	U	-	-	-	U	6	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International ‡Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending December 23, 1989 and December 24, 1988 (51st Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	41,318	37,958	371	21,014	20,888	142	469	613	4,430
NEW ENGLAND	1,673	1,193	24	639	545	2	41	7	9
Maine	13	12	6	25	30	-	-	-	2
N.H.	14	7	5	27	11	-	1	-	2
Vt.	1	3	1	9	6	-	-	-	-
Mass.	498	434	7	361	319	2	27	4	2
R.I.	30	33	1	64	39	-	6	1	-
Conn.	1,117	704	4	153	140	-	7	2	3
MID. ATLANTIC	8,803	7,571	62	4,398	4,317	4	137	64	766
Upstate N.Y.	945	607	14	364	541	1	40	14	57
N.Y. City	3,841	4,570	4	2,493	2,361	2	58	3	-
N.J.	1,438	1,001	13	862	748	-	31	24	43
Pa.	2,579	1,393	31	679	667	1	8	23	666
E.N. CENTRAL	1,885	1,191	61	2,159	2,315	3	48	54	141
Ohio	182	112	19	357	433	-	9	26	12
Ind.	59	51	9	186	249	1	4	18	22
Ill.	828	533	12	1,037	1,044	-	24	7	29
Mich.	660	433	21	453	490	1	6	3	29
Wis.	156	62	-	126	99	1	5	-	49
W.N. CENTRAL	330	263	48	553	507	54	7	75	574
Minn.	61	18	14	101	85	-	2	-	142
Iowa	36	27	7	55	56	-	2	4	110
Mo.	176	156	10	265	244	42	2	53	60
N. Dak.	4	2	1	15	15	-	-	1	61
S. Dak.	1	-	4	31	33	5	-	5	103
Nebr.	24	27	9	22	16	3	-	1	45
Kans.	28	33	3	64	58	4	1	11	53
S. ATLANTIC	13,711	14,236	26	4,448	4,459	6	44	224	1,318
Del.	226	102	2	42	47	-	2	1	36
Md.	824	697	1	382	434	2	9	19	370
D.C.	835	712	1	156	175	-	2	-	2
Va.	593	428	4	370	401	4	7	16	260
W. Va.	15	37	-	73	70	-	-	2	48
N.C.	1,141	828	6	590	525	-	2	118	7
S.C.	861	714	4	494	477	-	2	40	190
Ga.	2,380	2,542	3	779	731	-	6	24	229
Fla.	6,836	8,176	5	1,562	1,599	-	14	4	176
E.S. CENTRAL	3,036	2,037	10	1,610	1,742	8	3	65	343
Ky.	55	66	3	355	364	1	1	14	134
Tenn.	1,344	895	5	522	513	6	1	35	89
Ala.	920	567	1	455	518	-	1	6	116
Miss.	717	509	1	278	347	1	-	10	4
W.S. CENTRAL	6,217	4,416	27	2,566	2,628	43	17	96	600
Ark.	381	267	2	290	307	32	-	19	86
La.	1,583	857	-	333	335	-	1	1	13
Okla.	117	142	16	214	236	11	1	60	97
Tex.	4,136	3,150	9	1,729	1,750	-	15	16	404
MOUNTAIN	826	814	46	572	596	15	13	24	261
Mont.	2	3	-	16	30	1	-	14	73
Idaho	1	3	4	27	22	-	-	4	11
Wyo.	6	1	2	-	5	2	-	2	74
Colo.	63	111	9	54	97	3	2	3	33
N. Mex.	26	47	5	94	98	2	2	1	22
Ariz.	349	169	12	296	250	-	8	-	27
Utah	16	19	10	44	33	6	1	-	9
Nev.	363	461	4	41	61	1	-	-	12
PACIFIC	4,837	6,237	67	4,069	3,779	7	159	4	418
Wash.	444	256	5	231	226	1	10	-	-
Oreg.	239	313	-	139	154	4	6	1	-
Calif.	4,128	5,625	61	3,463	3,187	2	132	3	350
Alaska	11	15	-	53	50	-	-	-	68
Hawaii	15	28	1	183	162	-	11	-	-
Guam	4	3	-	68	31	-	3	-	-
P.R.	519	676	-	289	275	-	10	-	72
V.I.	8	2	-	4	6	-	1	-	-
Amer. Samoa	-	-	-	5	5	-	8	-	-
C.N.M.I.	8	1	-	21	25	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending
December 23, 1989 (51st Week)

Reporting Area	All Causes, By Age (Years)						P&I**	Total	Reporting Area	All Causes, By Age (Years)						P&I**	Total
	All Ages	≥65	45-64	25-44	1-24	<1				All Ages	≥65	45-64	25-44	1-24	<1		
NEW ENGLAND	702	485	121	56	12	28	55		S. ATLANTIC	1,234	784	261	109	39	41	71	
Boston, Mass.	209	132	32	25	3	17	18		Atlanta, Ga.	154	92	30	24	4	4	5	
Bridgeport, Conn.	49	38	6	2	1	2	3		Baltimore, Md.	276	173	55	30	7	11	22	
Cambridge, Mass.	23	16	4	3	-	-	2		Charlotte, N.C.	65	39	18	6	1	1	2	
Fall River, Mass.	28	23	5	-	-	-	-		Jacksonville, Fla.	137	100	22	7	5	3	8	
Hartford, Conn.	59	37	15	5	-	2	2		Miami, Fla.	104	54	30	10	6	4	1	
Lowell, Mass.	31	21	7	3	-	-	3		Norfolk, Va.	44	27	8	6	2	1	-	
Lynn, Mass.	16	10	4	2	-	-	1		Richmond, Va.	102	64	28	2	1	7	16	
New Bedford, Mass.	36	23	11	2	-	-	-		Savannah, Ga.	52	36	11	3	2	-	6	
New Haven, Conn.	36	20	7	6	2	1	1		St. Petersburg, Fla.	94	74	13	4	-	3	3	
Providence, R.I.	42	31	7	1	1	2	1		Tampa, Fla.	78	49	17	4	6	2	5	
Somerville, Mass.	6	5	1	-	-	-	2		Washington, D.C.	98	51	24	13	5	5	1	
Springfield, Mass.	48	35	7	3	1	2	4		Wilmington, Del.	30	25	5	-	-	-	2	
Waterbury, Conn.	43	36	3	2	1	1	6		E.S. CENTRAL	662	426	150	50	21	15	43	
Worcester, Mass.	76	58	12	2	3	1	12		Birmingham, Ala.	108	65	25	8	5	5	4	
MID. ATLANTIC	2,849	1,881	532	275	66	94	187		Chattanooga, Tenn.	47	34	8	3	-	2	2	
Albany, N.Y.	46	35	4	3	-	4	2		Knoxville, Tenn.	68	54	9	2	2	1	7	
Allentown, Pa.	21	18	1	2	-	-	1		Louisville, Ky.	76	49	19	6	-	2	2	
Buffalo, N.Y.	169	110	27	28	2	2	17		Memphis, Tenn.	176	96	51	19	8	2	20	
Camden, N.J.	33	16	10	3	1	3	-		Mobile, Ala.	12	7	3	2	-	-	-	
Elizabeth, N.J.	26	21	5	-	-	-	1		Montgomery, Ala.	63	41	12	4	4	2	2	
Erie, Pa.†	32	26	3	2	1	-	4		Nashville, Tenn.	112	80	23	6	2	1	6	
Jersey City, N.J.	37	26	2	5	2	1	1		W.S. CENTRAL	1,759	1,120	348	186	66	39	92	
N.Y. City, N.Y.	1,640	1,035	318	181	36	70	88		Austin, Tex.	74	52	9	7	5	1	7	
Newark, N.J.	69	30	18	14	5	2	6		Baton Rouge, La.	23	16	5	2	-	-	1	
Paterson, N.J.	27	20	6	1	-	-	1		Corpus Christi, Tex.	39	26	6	4	1	2	1	
Philadelphia, Pa.	296	204	62	17	6	7	24		Dallas, Tex.	187	117	31	24	10	5	5	
Pittsburgh, Pa.†	71	52	12	3	3	1	3		El Paso, Tex.	71	48	13	6	4	-	5	
Reading, Pa.	40	32	3	4	-	1	6		Fort Worth, Tex.	105	70	20	8	3	4	9	
Rochester, N.Y.	122	86	29	2	5	-	15		Houston, Tex.‡	734	436	169	89	24	16	18	
Schenectady, N.Y.	28	20	4	3	-	1	2		Little Rock, Ark.	52	34	10	5	2	1	4	
Scranton, Pa.†	31	26	3	2	-	-	5		New Orleans, La.	98	65	18	11	2	2	-	
Syracuse, N.Y.	75	52	14	2	5	2	6		San Antonio, Tex.	213	145	36	19	8	5	20	
Trenton, N.J.	30	24	5	1	-	-	1		Shreveport, La.	67	48	11	4	3	1	6	
Utica, N.Y.	24	22	2	-	-	-	-		Tulsa, Okla.	96	63	20	7	4	2	16	
Yonkers, N.Y.	32	26	4	2	-	-	4		MOUNTAIN	684	453	134	53	22	21	30	
E.N. CENTRAL	2,318	1,574	467	154	46	77	114		Albuquerque, N. Mex.	93	64	13	8	4	3	4	
Akron, Ohio	76	57	11	4	-	4	-		Colo. Springs, Colo.	34	26	6	2	-	-	2	
Canton, Ohio	45	36	7	1	-	1	3		Denver, Colo.	98	57	20	11	6	4	1	
Chicago, Ill.‡	564	362	125	45	10	22	16		Las Vegas, Nev.	102	60	27	9	4	2	7	
Cincinnati, Ohio‡	128	89	29	6	2	2	14		Ogden, Utah	12	11	-	1	-	-	2	
Cleveland, Ohio	154	105	31	10	3	5	4		Phoenix, Ariz.	153	98	31	14	6	4	4	
Columbus, Ohio	185	116	41	17	4	7	1		Pueblo, Colo.	19	17	2	-	-	-	4	
Dayton, Ohio	121	81	26	4	5	5	12		Salt Lake City, Utah‡	47	32	8	3	1	3	1	
Detroit, Mich.‡	257	155	55	28	6	13	7		Tucson, Ariz.	126	88	27	5	1	5	5	
Evansville, Ind.	32	24	7	-	1	-	-		PACIFIC	1,781	1,173	292	183	63	57	84	
Fort Wayne, Ind.	45	31	7	5	2	-	6		Berkeley, Calif.	19	16	1	1	-	1	-	
Gary, Ind.	15	9	2	3	1	-	2		Fresno, Calif.	76	51	17	4	1	3	1	
Grand Rapids, Mich.	69	53	11	1	2	2	4		Glendale, Calif.	25	12	8	3	1	-	1	
Indianapolis, Ind.	182	130	32	12	4	4	8		Honolulu, Hawaii	59	45	8	5	-	1	12	
Madison, Wis.‡	38	30	5	2	1	-	4		Long Beach, Calif.	87	49	15	7	8	8	4	
Milwaukee, Wis.	129	94	21	6	4	4	1		Los Angeles, Calif.	418	266	60	51	29	3	7	
Peoria, Ill.	47	29	14	1	-	3	5		Oakland, Calif.	74	38	16	9	2	9	4	
Rockford, Ill.	44	36	5	3	-	-	8		Pasadena, Calif.	30	23	4	1	-	2	1	
South Bend, Ind.	32	27	3	1	-	1	2		Portland, Oreg.	131	100	16	9	2	4	6	
Toledo, Ohio	88	60	23	2	1	2	13		Sacramento, Calif.	133	86	27	12	3	5	13	
Youngstown, Ohio‡	67	50	12	3	-	2	4		San Diego, Calif.	136	94	21	15	3	2	10	
W.N. CENTRAL	828	620	130	37	20	21	52		San Francisco, Calif.	163	96	28	31	3	5	4	
Des Moines, Iowa	73	52	12	3	3	3	8		San Jose, Calif.	178	119	34	16	3	4	15	
Duluth, Minn.	27	24	3	-	-	-	1		Seattle, Wash.	130	89	20	8	6	7	3	
Kansas City, Kans.	21	16	2	2	1	-	1		Spokane, Wash.	66	46	8	8	1	3	2	
Kansas City, Mo.	105	72	25	3	2	3	15		Tacoma, Wash.	56	43	9	3	1	-	1	
Lincoln, Nebr.	44	38	3	2	1	-	4		TOTAL	12,817 ^{††}	8,516	2,435	1,103	355	393	728	
Minneapolis, Minn.	153	111	26	7	5	4	13										
Omaha, Nebr.	92	68	20	1	3	-	4										
St. Louis, Mo.	191	146	24	9	4	8	1										
St. Paul, Minn.	73	52	9	8	1	3	4										
Wichita, Kans.	49	41	6	2	-	-	1										

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

‡Data not available. Figures are estimates based on average of past available 4 weeks.

TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	52nd Week Ending			Cumulative, 52nd Week Ending		
	Dec. 30, 1989	Dec. 31, 1988	Median 1984-1988	Dec. 30, 1989	Dec. 31, 1988	Median 1984-1988
Acquired Immunodeficiency Syndrome (AIDS)	-	U*	304	34,340	30,878	13,405
Aseptic meningitis	127	220	186	9,983	7,161	10,379
Encephalitis: Primary (arthropod-borne & unspc)	15	26	28	916	830	1,228
Post-infectious	3	1	3	85	124	118
Gonorrhea: Civilian	9,063	13,981	13,646	689,922	696,531	850,378
Military	149	180	213	10,829	11,570	16,969
Hepatitis: Type A	575	1,422	662	35,165	28,030	23,169
Type B	428	999	765	22,963	23,338	25,842
Non A, Non B	49	112	95	2,323	2,630	3,494
Unspecified	69	105	105	2,304	2,468	4,368
Legionellosis	32	58	26	1,128	1,046	832
Leprosy	1	3	3	169	180	249
Malaria	18	45	28	1,232	1,044	1,034
Measles: Total†	559	146	28	16,236	3,065	3,065
Indigenous	516	143	28	15,511	2,731	2,731
Imported	43	3	3	730	334	334
Meningococcal infections	39	86	75	2,595	2,812	2,689
Mumps	80	223	223	5,611	4,892	4,892
Pertussis	61	229	101	3,745	3,379	3,379
Rubella (German measles)	1	10	6	373	230	530
Syphilis (Primary & Secondary): Civilian	808	879	467	42,600	38,837	27,947
Military	-	22	8	257	241	169
Toxic Shock syndrome	3	21	9	376	371	367
Tuberculosis	452	917	941	21,520	21,805	22,144
Tularemia	2	13	4	144	197	197
Typhoid Fever	9	30	12	478	428	379
Typhus fever, tick-borne (RMSF)	5	13	6	619	612	698
Rabies, animal	25	114	100	4,460	4,327	5,318

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1989		Cum. 1989
Anthrax	-	Leptospirosis (Upstate N.Y. 1)	98
Botulism: Foodborne	24	Plague	4
Infant (Va. 1, Tenn. 1)	27	Poliomyelitis, Paralytic§	-
Other	5	Psittacosis (N.Y. City 1, Minn. 1, N.C. 5, S.C. 1, Wash. 1)	114
Brucellosis (Calif. 1)	84	Rabies, human	1
Cholera	-	Tetanus	47
Congenital rubella syndrome	3	Trichinosis (Okla. 1)	28
Congenital syphilis, ages < 1 year	243		
Diphtheria	2		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.

†Two of the 559 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

§Thirteen cases of suspected poliomyelitis have been reported in 1989 and are under investigation; 9 of 14 suspected cases in 1988 have been confirmed to date and 9 were determined to be vaccine-associated.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending December 30, 1989 and December 31, 1988 (52nd Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel- losis	Leprosy
			Primary	Post-in- fectious			A	B	NA,NB	Unspeci- fied		
	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	34,340	9,983	916	85	689,922	696,531	35,165	22,963	2,323	2,304	1,128	169
NEW ENGLAND	1,404	536	27	2	20,387	21,932	728	1,118	71	83	72	10
Maine	66	32	6	-	259	394	24	69	6	1	9	-
N.H.	39	56	1	-	181	274	59	62	10	4	2	-
Vt.	20	42	4	-	70	114	36	81	8	-	4	-
Mass.	758	169	8	2	8,069	7,549	239	616	27	61	43	8
R.I.	88	120	-	-	1,414	1,998	54	77	5	10	14	1
Conn.	433	117	8	-	10,394	11,603	316	213	15	7	-	1
MID. ATLANTIC	9,621	1,426	43	7	95,223	113,016	4,221	3,586	212	233	296	23
Upstate N.Y.	1,426	579	35	5	18,271	16,655	1,016	735	78	21	102	4
N.Y. City	4,858	198	5	2	33,223	48,567	472	1,428	33	174	51	16
N.J.	2,258	-	3	-	14,403	16,222	472	593	33	7	46	2
Pa.	1,079	649	-	-	29,326	31,572	2,261	830	68	31	97	1
E.N. CENTRAL	2,619	1,976	328	9	132,189	118,384	2,122	2,753	265	116	301	4
Ohio	481	670	128	4	34,548	26,650	419	509	43	25	124	-
Ind.	357	268	45	3	9,880	8,857	216	422	31	43	61	1
Ill.	1,147	395	74	2	44,428	35,412	938	725	109	28	20	3
Mich.	504	520	50	-	33,627	37,412	298	678	48	20	53	-
Wis.	130	123	31	-	9,706	10,053	251	419	34	-	43	-
W.N. CENTRAL	856	563	54	4	33,615	29,980	1,482	1,000	117	31	47	1
Minn.	176	96	18	1	3,807	3,950	164	116	24	7	6	-
Iowa	57	85	15	-	2,757	2,385	182	49	15	5	6	-
Mo.	445	221	3	-	20,625	17,366	776	689	50	13	19	-
N. Dak.	8	14	4	-	143	187	14	23	4	2	1	-
S. Dak.	4	15	4	-	273	474	26	10	9	-	2	-
Nebr.	33	23	6	-	1,684	1,416	97	30	3	2	6	1
Kans.	133	109	4	3	4,326	4,202	223	83	12	2	7	-
S. ATLANTIC	7,226	1,966	170	29	186,523	195,306	3,657	4,403	352	381	144	2
Del.	80	84	1	-	3,411	3,142	87	141	6	8	12	-
Md.	727	235	19	2	21,400	21,044	1,130	736	32	31	32	-
D.C.	500	26	-	-	10,255	14,490	12	41	3	-	1	-
Va.	394	408	44	3	15,995	14,464	327	310	69	241	13	-
W. Va.	53	96	87	-	1,500	1,329	27	112	14	10	-	-
N.C.	491	221	11	2	29,132	28,132	465	1,072	99	-	36	1
S.C.	329	40	1	1	16,493	15,067	92	617	4	11	10	-
Ga.	1,117	136	3	2	37,110	36,907	383	434	14	9	26	-
Fla.	3,535	720	4	19	51,227	60,731	1,134	940	111	71	14	1
E.S. CENTRAL	769	699	49	3	56,843	53,907	422	1,639	160	13	65	-
Ky.	115	220	20	1	5,516	5,510	129	402	56	6	9	-
Tenn.	266	126	5	-	19,187	19,075	161	843	35	-	40	-
Ala.	218	249	21	1	18,208	15,840	86	253	57	3	14	-
Miss.	170	104	3	1	13,932	13,482	46	141	12	4	2	-
W.S. CENTRAL	3,173	976	92	8	72,758	73,659	3,982	2,338	153	530	54	25
Ark.	78	47	10	-	8,086	7,299	285	76	15	13	3	-
La.	511	82	26	1	15,381	14,939	272	380	17	3	10	-
Okla.	169	83	12	5	6,449	7,037	512	216	38	40	26	-
Tex.	2,415	764	44	2	42,842	44,384	2,913	1,666	83	474	15	25
MOUNTAIN	1,137	333	17	6	14,444	15,004	5,234	1,535	218	167	69	3
Mont.	18	6	-	-	196	400	89	50	7	3	3	1
Idaho	23	2	-	1	172	318	166	133	13	4	4	-
Wyo.	16	11	-	-	109	202	68	10	4	-	-	-
Colo.	392	162	4	2	3,162	3,336	524	180	63	71	6	-
N. Mex.	93	13	2	1	1,248	1,479	731	216	34	3	8	1
Ariz.	338	101	5	-	5,775	5,551	2,795	586	53	69	28	1
Utah	74	24	1	2	441	531	519	120	28	6	8	-
Nev.	183	14	5	-	3,341	3,187	342	240	16	11	12	-
PACIFIC	7,535	1,508	136	17	77,940	75,343	13,317	4,591	775	750	80	101
Wash.	486	-	6	1	6,554	7,152	3,115	998	203	74	29	10
Oreg.	228	-	-	-	3,104	3,239	2,306	545	82	17	2	2
Calif.	6,619	1,377	114	16	66,617	63,314	7,080	2,898	473	642	45	70
Alaska	17	37	13	-	1,140	1,048	642	60	9	5	1	-
Hawaii	185	94	3	-	525	590	174	90	8	12	3	19
Guam	1	24	1	-	139	143	8	1	-	9	-	1
P.R.	1,499	139	6	1	1,073	1,307	196	259	26	19	-	9
V.I.	27	-	-	-	697	450	-	9	-	-	-	-
Amer. Samoa	-	-	-	-	44	77	36	-	2	-	-	5
C.N.M.I.	-	-	-	-	77	52	3	10	-	2	-	1

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending December 30, 1989 and December 31, 1988 (52nd Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin- gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	1989	Cum. 1989	Cum. 1988
UNITED STATES	1,232	516	15,511	43	730	3,065	2,595	80	5,611	61	3,745	3,379	1	373	230
NEW ENGLAND	84	-	345	-	38	129	195	-	88	24	417	327	-	6	12
Maine	1	-	-	-	1	7	17	-	-	2	27	24	-	-	-
N.H.	2	-	9	-	7	100	18	-	15	14	30	47	-	4	6
Vt.	4	-	1	-	2	-	10	-	3	1	11	5	-	1	-
Mass.	46	-	87	-	21	6	106	-	59	7	306	211	-	1	5
R.I.	19	-	37	-	3	-	1	-	-	-	21	17	-	-	-
Conn.	12	-	211	-	4	16	43	-	11	-	22	23	-	-	-
MID. ATLANTIC	231	-	807	40	230	995	388	1	486	3	327	331	-	35	17
Upstate N.Y.	37	-	58	40 ¹	139	41	135	1	182	3	151	231	-	14	2
N.Y. City	95	-	108	-	17	57	46	-	23	-	17	11	-	16	9
N.J.	61	-	417	-	16	354	76	-	200	-	35	19	-	5	4
Pa.	38	-	224	-	58	543	131	-	81	-	124	70	-	-	2
E.N. CENTRAL	82	481	6,106	-	116	273	336	-	636	3	599	317	-	29	34
Ohio	11	481	2,685	-	35	109	123	-	165	-	147	80	-	3	1
Ind.	11	-	112	-	-	57	33	-	51	-	60	81	-	-	-
Ill.	36	-	2,572	-	14	72	86	-	207	-	167	59	-	22	29
Mich.	16	-	321	-	23	31	70	-	161	2	48	39	-	1	4
Wis.	8	-	416	-	44	4	24	-	52	1	177	78	-	3	-
W.N. CENTRAL	37	-	833	1	21	78	77	12	453	-	198	188	-	7	2
Minn.	10	-	17	1 ¹	10	11	17	-	2	-	66	106	-	-	-
Iowa	5	-	12	-	1	2	2	1	53	-	15	34	-	1	-
Mo.	13	-	561	-	-	65	21	1	83	-	92	25	-	4	-
N. Dak.	2	-	-	-	-	-	-	-	-	-	4	11	-	1	-
S. Dak.	2	-	-	-	-	-	8	-	-	-	4	5	-	-	-
Nebr.	2	-	111	-	2	-	18	-	5	-	9	-	-	-	-
Kans.	3	-	132	-	8	-	11	10	310	-	8	7	-	1	2
S. ATLANTIC	216	35	698	2	78	437	476	34	1,125	3	370	275	-	22	18
Del.	7	-	42	-	1	-	2	-	1	-	1	7	-	-	-
Md.	39	8	77	21	38	17	77	15	582	-	80	48	-	2	1
D.C.	11	-	37	-	5	-	15	1	143	-	4	1	-	-	-
Va.	46	-	19	-	3	239	72	-	132	-	36	29	-	-	11
W. Va.	3	-	53	-	-	6	13	1	17	2	36	10	-	-	-
N.C.	21	-	187	-	3	5	68	-	45	-	79	67	-	1	1
S.C.	10	-	15	-	-	-	33	7	56	-	-	1	-	-	-
Ga.	16	-	2	-	16	-	79	10	102	1	55	40	-	-	2
Fla.	63	27	266	-	12	170	117	-	47	-	79	72	-	19	3
E.S. CENTRAL	20	-	250	-	5	70	91	-	238	-	200	112	-	5	2
Ky.	1	-	40	-	4	36	46	-	9	-	1	15	-	-	-
Tenn.	5	-	150	-	-	-	13	-	86	-	113	30	-	4	2
Ala.	8	-	59	-	1	-	27	-	29	-	79	62	-	1	-
Miss.	6	-	1	-	-	34	5	N	N	-	7	5	-	-	-
W.S. CENTRAL	78	-	3,264	-	75	26	186	29	1,699	-	378	249	-	50	24
Ark.	-	-	3	-	19	1	13	6	202	-	31	40	-	-	4
La.	3	-	119	-	-	1	47	9	745	-	31	21	-	5	-
Okla.	8	-	126	-	-	8	25	3	211	-	66	69	-	1	1
Tex.	67	-	3,016	-	56	16	101	11	541	-	250	119	-	44	19
MOUNTAIN	29	-	364	-	54	208	78	-	289	1	687	1,038	-	37	6
Mont.	1	-	12	-	1	86	2	-	4	-	43	4	-	1	-
Idaho	2	-	-	-	7	1	4	-	39	-	76	369	-	32	-
Wyo.	1	-	-	-	-	-	1	-	8	-	-	2	-	2	-
Colo.	8	-	80	-	19	115	25	-	82	1	107	75	-	1	2
N. Mex.	5	-	16	-	15	-	2	N	N	-	35	50	-	-	-
Ariz.	9	-	141	-	4	4	30	-	130	-	400	493	-	-	-
Utah	-	-	114	-	-	2	6	-	19	-	25	44	-	-	3
Nev.	3	-	1	-	8	-	8	-	7	-	1	1	-	1	1
PACIFIC	455	-	2,844	-	113	849	768	4	597	27	569	542	1	182	115
Wash.	41	-	31	-	22	7	88	4	56	1	194	132	-	-	-
Oreg.	20	-	12	-	48	8	59	N	N	-	18	52	-	4	-
Calif.	383	-	2,780	-	31	820	604	-	519	24	328	289	-	155	84
Alaska	3	-	1	-	-	2	13	-	2	-	1	8	-	-	-
Hawaii	8	-	20	-	12	12	4	-	20	2	28	61	1	23	31
Guam	7	U	1	U	2	1	1	U	12	U	1	-	U	-	1
P.R.	1	-	568	-	-	289	8	-	8	-	6	15	-	8	3
V.I.	-	-	4	-	-	-	-	-	21	-	-	-	-	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	3	U	-	-	U	-	-
C.N.M.I.	1	U	-	U	-	-	-	U	6	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable ¹International ²Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending December 30, 1989 and December 31, 1988 (52nd Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	42,600	38,837	376	21,520	21,805	144	478	619	4,460
NEW ENGLAND	1,716	1,207	24	717	608	2	41	7	9
Maine	13	12	6	25	30	-	-	-	2
N.H.	14	7	5	30	11	-	1	-	2
Vt.	1	3	1	9	6	-	-	-	-
Mass.	512	441	7	430	381	2	27	4	2
R.I.	30	35	1	64	39	-	6	1	-
Conn.	1,146	709	4	159	141	-	7	2	3
MID. ATLANTIC	8,843	7,758	62	4,470	4,467	4	138	66	772
Upstate N.Y.	957	635	14	372	577	1	41	14	57
N.Y. City	3,841	4,695	4	2,533	2,426	2	58	3	-
N.J.	1,466	1,029	13	886	791	-	31	26	45
Pa.	2,579	1,399	31	679	673	1	8	23	670
E.N. CENTRAL	2,049	1,253	63	2,189	2,385	3	48	53	141
Ohio	182	114	19	381	435	-	9	25	12
Ind.	61	51	9	186	259	1	4	18	22
Ill.	944	544	14	1,034	1,078	-	24	7	29
Mich.	695	481	21	462	510	1	6	3	29
Wis.	167	63	-	126	103	1	5	-	49
W.N. CENTRAL	342	267	49	571	542	55	7	75	581
Minn.	64	18	15	103	89	-	2	-	147
Iowa	36	28	7	68	56	-	2	4	110
Mo.	183	159	10	265	275	43	2	53	60
N. Dak.	4	2	1	15	15	-	-	1	61
S. Dak.	1	-	4	31	33	5	-	5	103
Nebr.	26	27	9	22	16	3	-	1	45
Kans.	28	33	3	67	58	4	1	11	55
S. ATLANTIC	14,084	14,633	26	4,563	4,779	6	45	224	1,324
Del.	230	104	2	46	47	-	2	1	36
Md.	853	705	1	382	459	2	10	19	373
D.C.	835	726	1	156	179	-	2	-	2
Va.	593	449	4	381	406	4	7	16	262
W. Va.	16	37	-	73	70	-	-	2	48
N.C.	1,162	840	6	637	621	-	2	118	7
S.C.	861	741	4	494	484	-	2	40	191
Ge.	2,380	2,593	3	801	835	-	6	24	229
Fla.	7,154	8,438	5	1,593	1,678	-	14	4	176
E.S. CENTRAL	3,133	2,076	10	1,674	1,802	8	3	66	343
Ky.	59	68	3	355	384	1	1	15	134
Tenn.	1,427	922	5	562	513	6	1	35	89
Ala.	920	567	1	464	524	-	1	6	116
Miss.	727	519	1	293	381	1	-	10	4
W.S. CENTRAL	6,484	4,443	27	2,636	2,701	43	17	100	604
Ark.	387	267	2	313	338	32	-	21	86
La.	1,632	881	-	333	349	-	1	1	14
Okla.	124	145	16	220	236	11	1	62	99
Tex.	4,341	3,150	9	1,770	1,778	-	15	16	405
MOUNTAIN	892	858	46	575	630	16	13	24	262
Mont.	2	3	-	16	39	1	-	14	74
Idaho	1	3	4	28	22	-	-	4	11
Wyo.	6	1	2	-	5	2	-	2	74
Colo.	63	112	9	54	97	3	2	3	33
N. Mex.	31	50	5	96	108	2	2	1	22
Ariz.	380	169	12	296	263	-	8	-	27
Utah	16	20	10	44	35	7	1	-	9
Nev.	393	500	4	41	61	1	-	-	12
PACIFIC	5,057	6,342	69	4,125	3,891	7	166	4	424
Wash.	444	265	7	240	234	1	10	-	-
Oreg.	245	326	-	145	161	4	6	1	-
Calif.	4,341	5,708	61	3,496	3,274	2	139	3	356
Alaska	12	15	-	55	52	-	-	-	68
Hawaii	15	28	1	189	170	-	11	-	-
Guam	4	3	-	76	31	-	3	-	-
P.R.	519	682	-	289	275	-	10	-	74
V.I.	10	2	-	4	6	-	1	-	-
Amer. Samoa	-	-	-	5	5	-	8	-	-
C.N.M.I.	11	1	-	24	25	-	-	-	-

U: Unavailable

**TABLE IV. Deaths in 121 U.S. cities,* week ending
December 30, 1989 (52nd Week)**

Reporting Area	All Causes, By Age (Years)						P&I**	Total	Reporting Area	All Causes, By Age (Years)						P&I**	Total
	All Ages	≥65	45-64	25-44	1-24	<1				All Ages	≥65	45-64	25-44	1-24	<1		
NEW ENGLAND	667	454	126	53	17	17	51		S. ATLANTIC	1,150	696	278	118	39	19	65	
Boston, Mass.	183	97	46	26	3	11	19		Atlanta, Ga.	129	69	34	19	6	1	5	
Bridgeport, Conn.	37	26	8	1	1	1	1		Baltimore, Md.	269	165	70	27	4	3	25	
Cambridge, Mass.	23	19	3	-	-	-	1		Charlotte, N.C.	31	20	6	4	-	1	-	
Fall River, Mass.	36	30	5	1	-	-	-		Jacksonville, Fla.	104	69	18	8	6	3	11	
Hartford, Conn.	54	40	5	6	3	-	3		Miami, Fla.	174	100	45	22	7	-	-	
Lowell, Mass.	29	24	2	2	-	1	-		Norfolk, Va.	49	27	7	6	3	6	5	
Lynn, Mass.	26	22	4	-	-	-	1		Richmond, Va.	73	48	22	-	3	-	6	
New Bedford, Mass.†	28	22	5	1	-	-	1		Savannah, Ga.	32	12	14	5	1	-	1	
New Haven, Conn.	50	33	9	5	2	1	9		St. Petersburg, Fla.	54	44	7	1	1	1	5	
Providence, R.I.	40	26	12	1	1	-	1		Tampa, Fla.	57	35	15	5	1	1	4	
Somerville, Mass.	6	3	1	1	1	-	2		Washington, D.C.‡	146	81	35	20	7	3	2	
Springfield, Mass.	60	41	11	4	2	2	3		Wilmington, Del.	32	26	5	1	-	-	1	
Waterbury, Conn.	36	28	4	2	2	-	4		E.S. CENTRAL	734	513	135	51	13	22	44	
Worcester, Mass.	59	43	11	3	1	1	6		Birmingham, Ala.	101	80	11	4	2	4	5	
MID. ATLANTIC	2,742	1,807	500	301	71	63	166		Chattanooga, Tenn.	41	31	8	2	-	-	3	
Albany, N.Y.	54	42	8	-	2	2	6		Knoxville, Tenn.	103	69	18	13	-	3	8	
Allentown, Pa.	20	13	4	3	-	-	3		Louisville, Ky.	73	50	16	4	-	3	3	
Buffalo, N.Y.	105	64	24	8	6	3	9		Memphis, Tenn.‡	165	107	34	16	4	4	16	
Camden, N.J.	48	24	11	7	3	3	-		Mobile, Ala.	86	59	17	4	3	3	4	
Elizabeth, N.J.	22	13	3	5	-	1	-		Montgomery, Ala.‡	53	40	8	2	1	2	3	
Erie, Pa.†	37	28	5	2	1	1	5		Nashville, Tenn.	112	77	23	6	3	3	2	
Jersey City, N.J.‡	66	43	12	7	1	3	1		W.S. CENTRAL	1,566	979	341	151	59	36	80	
N.Y. City, N.Y.	1,504	979	274	194	35	22	68		Austin, Tex.‡	68	47	13	4	2	2	4	
Newark, N.J.	73	27	14	20	9	3	10		Baton Rouge, La.	57	35	15	7	-	-	8	
Paterson, N.J.	36	25	4	5	1	1	-		Corpus Christi, Tex.	38	23	9	2	4	-	4	
Philadelphia, Pa.‡	299	197	62	22	7	11	17		Dallas, Tex.	174	101	32	21	13	7	4	
Pittsburgh, Pa.†	73	51	14	3	1	4	3		El Paso, Tex.	61	38	16	3	3	1	6	
Reading, Pa.	38	32	4	2	-	-	7		Fort Worth, Tex	85	56	17	6	4	2	5	
Rochester, N.Y.	142	112	12	10	2	6	18		Houston, Tex.‡	734	436	169	89	24	16	18	
Schenectady, N.Y.	25	15	8	2	-	-	2		Little Rock, Ark.	43	28	9	4	-	2	1	
Scranton, Pa.†	36	26	6	2	2	-	1		New Orleans, La.	32	20	7	3	2	-	-	
Syracuse, N.Y.	99	66	23	6	1	3	9		San Antonio, Tex.	150	102	34	5	5	4	17	
Trenton, N.J.	17	12	4	1	-	-	-		Shreveport, La.	48	35	9	3	1	-	7	
Utica, N.Y.	19	14	5	-	-	-	3		Thule, Okla.	76	58	11	4	1	2	6	
Yonkers, N.Y.‡	29	24	3	2	-	-	4		MOUNTAIN	765	517	136	58	33	21	34	
E.N. CENTRAL	2,151	1,482	411	135	45	78	91		Albuquerque, N. Mex.	94	60	13	7	12	2	6	
Akron, Ohio	46	28	12	2	1	3	-		Colo. Springs, Colo.	43	28	9	4	-	-	2	
Canton, Ohio	30	26	3	1	-	-	3		Denver, Colo.	117	74	21	16	3	3	-	
Chicago, Ill.‡	564	362	125	45	10	22	16		Las Vegas, Nev.	166	113	37	7	7	2	9	
Cincinnati, Ohio	79	55	13	7	1	3	6		Ogden, Utah	11	6	2	1	1	1	-	
Cleveland, Ohio	158	95	41	10	7	5	-		Phoenix, Ariz.	162	116	23	10	7	6	2	
Columbus, Ohio	223	151	42	14	6	10	13		Pueblo, Colo.	36	27	8	1	-	-	7	
Dayton, Ohio	105	79	20	6	-	-	13		Salt Lake City, Utah	41	33	3	2	1	2	-	
Detroit, Mich.	189	118	36	20	7	8	4		Tucson, Ariz.	95	60	20	10	2	3	8	
Evansville, Ind.	20	15	2	2	1	-	1		PACIFIC	1,781	1,189	305	159	36	59	124	
Fort Wayne, Ind.	54	40	6	4	1	3	1		Berkeley, Calif.	16	14	1	1	-	-	3	
Gary, Ind.	13	8	5	-	-	-	2		Fresno, Calif.	85	61	17	3	-	4	2	
Grand Rapids, Mich.	86	50	11	1	-	4	2		Glendale, Calif.	13	12	-	-	-	-	-	
Indianapolis, Ind.	138	103	23	7	3	2	3		Honolulu, Hawaii	100	81	11	5	1	2	22	
Madison, Wis.‡	38	30	5	2	1	-	4		Long Beach, Calif.‡	85	58	16	6	2	3	9	
Milwaukee, Wis.	103	82	13	2	-	6	3		Los Angeles, Calif.	358	232	62	44	8	4	15	
Peoria, Ill.	42	31	7	3	-	1	3		Oakland, Calif.‡	71	40	13	9	5	4	3	
Rockford, Ill.	63	44	10	1	3	5	2		Pasadena, Calif.	26	19	4	2	1	-	1	
South Bend, Ind.	51	41	5	3	-	2	3		Portland, Oreg.	129	92	19	9	3	6	5	
Toledo, Ohio	98	71	19	2	4	2	10		Sacramento, Calif.	147	105	27	9	3	3	24	
Youngstown, Ohio‡	71	53	13	3	-	2	4		San Diego, Calif.	179	113	27	18	6	11	13	
W.N. CENTRAL	604	437	103	34	12	18	28		San Francisco, Calif.	153	90	37	22	2	2	4	
Des Moines, Iowa	40	27	8	2	-	3	3		San Jose, Calif.	163	109	36	9	1	8	13	
Duluth, Minn.	15	11	2	1	1	-	2		Seattle, Wash.	136	87	21	16	4	8	2	
Kansas City, Kans.	21	14	5	2	-	-	6		Spokane, Wash.‡	60	44	10	4	-	2	3	
Kansas City, Mo.	133	94	27	7	2	3	1		Tacoma, Wash.	40	32	4	2	-	2	5	
Lincoln, Nebr.	21	14	5	1	1	-	6		TOTAL	12,140††	8,074	2,335	1,060	325	333	683	
Minneapolis, Minn.	108	82	14	7	2	3	6										
Omaha, Nebr.	67	53	10	2	1	1	6										
St. Louis, Mo.	84	63	13	4	1	3	3										
St. Paul, Minn.	61	39	10	5	3	4	1										
Wichita, Kans.	54	40	9	3	1	1	-										

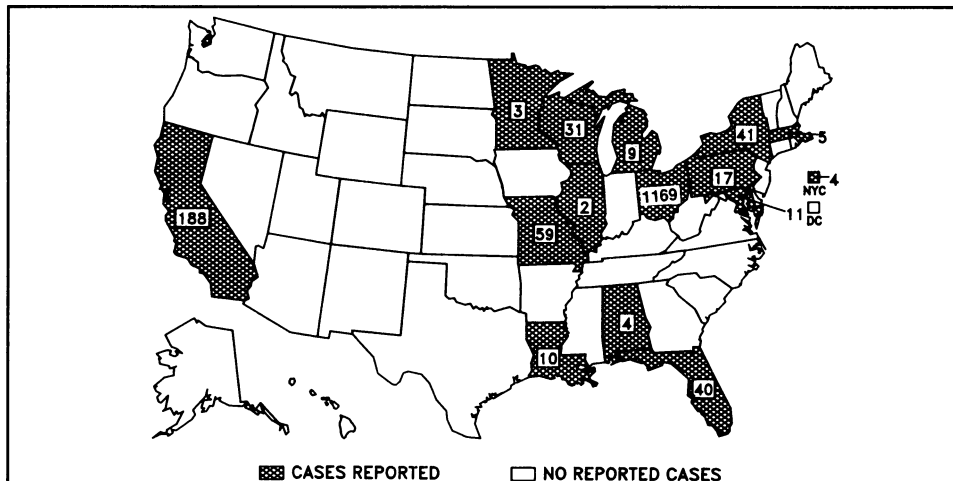
*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

‡Data not available. Figures are estimates based on average of past available 4 weeks.

FIGURE I. Reported measles cases – United States, weeks 49–52, 1989

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